

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1. (Currently amended): ~~A system for a device, wherein the device includes~~
2 ~~a printed circuit board, An optical mouse system~~ comprising:
3 a printed circuit board;
4 a motion sensor operatively coupled to said printed circuit board ~~of said device,~~
5 said motion sensor having a motion signal output; and
6 a detection circuit connected to said motion signal output and having a trigger
7 signal output,
8 said motion sensor comprising:
9 a ball contact; and
10 at least one stationary contact formed directly on a surface of said printed
11 circuit board ~~of said device,~~
12 wherein said ball contact is in electrical contact with said at least one
13 stationary contact,
14 said optical mouse having a sleep state and a wake state,
15 wherein said optical mouse is inactive during said sleep state and electric current
16 consumption by said optical mouse during said sleep state is less than electric current
17 consumption by said optical mouse during said wake state,
18 wherein said optical mouse transitions from said sleep state to said wake state
19 when a trigger signal is produced at said trigger signal output.

2. (Canceled)

1 3. (Previously Presented): The system of claim 1, wherein said trigger
2 signal output is a wake-up signal output.

4. (Canceled)

1 5. (Original): The system of claim 1, wherein said motion sensor is a
2 mechanical motion sensor.

1 6. (Original): The system of claim 5, wherein said motion sensor is a tilt
2 sensor.

7-10. (Canceled)

1 11. (Previously Presented): The system of claim 1, wherein said at least one
2 stationary contact is printed on said printed circuit board.

1 12. (Previously Presented): The system of claim 1, wherein said at least one
2 stationary contact has a hole in a center thereof.

1 13. (Previously Presented): The system of claim 1, wherein the at least one
2 stationary contact has an inclined surface toward a center thereof.

1 14. (Previously Presented): The system of claim 6, wherein a sensitivity of
2 said tilt sensor is adjustable during manufacture of said tilt sensor.

1 15. (Previously Presented): The system of claim 6, wherein said at least one
2 stationary contact has a hole in a center thereof, and a sensitivity of said tilt sensor is adjusted by
3 a size of the hole.

1 16. (Previously Presented): The system of claim 14, wherein the sensitivity of
2 said tilt sensor is adjustable by a size of the ball contact.

1 17. (Previously Presented): The system of claim 14, wherein the sensitivity of
2 said tilt sensor is adjustable by a weight of the ball contact.

1 18. (Previously Presented): The system of claim 14, wherein the sensitivity of
2 said tilt sensor is adjustable by a conductivity of the ball contact.

1 19. (Currently amended): The system of claim 6, wherein a plurality of
2 stationary contacts are formed directly on a surface of said printed circuit board ~~of said device~~.

1 20. (Previously Presented): The system of claim 19, wherein the plurality of
2 stationary contacts are wedge-shaped elements arranged about a central point.

1 21. (Previously presented): The system of claim 19, wherein there are at least
2 2 stationary contacts.

 22. (Withdrawn, Previously presented): The system of claim 19, wherein
there are at least 4 stationary contacts.

 23. (Withdrawn, Previously presented): The system of claim 19, wherein
there are at least 6 stationary contacts.

 24. (Withdrawn, Previously presented): The system of claim 19, wherein
there are at least 8 stationary contacts.

1 25. (Previously presented): The system of claim 6, wherein said ball contact
2 is a conductive ball.

1 26. (Previously presented): The system of claim 6, wherein the ball contact is
2 gold-plated.

1 27. (Previously presented): The system of claim 6, wherein said stationary
2 contact is gold-plated.

1 28. (Original): The system of claim 1, wherein said motion sensor further
2 includes a housing and said housing is sealed.

29. (Withdrawn): The system of claim 28, wherein said housing is sealed with an O-ring.

1 30. (Original): The system of claim 28, wherein said housing is sealed with
2 an adhesive.

1 31. (Previously Presented): The system of claim 1, wherein said motion
2 sensor comprises an electrical switch and said detection circuit detects a change in a state of
3 whether said switch is opened or closed.

1 32. (Previously Presented): The system of claim 31, wherein said detection
2 circuit comprises: a motion detector that determines if there is a change in the opened or closed
3 state of the electrical switch; and a signal processing circuit having a latch circuit, wherein said
4 latch circuit creates a signal of a particular level for a period of time to generate a wake-up
5 signal.

1 33. (Previously Presented): The system of claim 32, wherein the motion
2 detector of said detection circuit comprises two invertors for amplifying and converting the
3 motion signal output from the motion sensor.

34 and 35. (Canceled)

36. (Withdrawn, Previously Presented): A method for operating an input device, wherein the device includes a printed circuit board, comprising:

operatively coupling a motion sensor to said printed circuit board, said motion sensor comprising:

a ball contact; and

at least one stationary contact formed directly on a surface of said printed circuit board of said device,

wherein said ball contact is in electrical contact with said at least one stationary contact;

outputting a motion signal from said motion sensor;
providing a detection circuit responsive to said motion signal; and
outputting a wake-up signal from said detection circuit to circuitry of said input device to activate said input device.

37. (Withdrawn): The method of claim 36, wherein said input device further comprises a microprocessor and said microprocessor wakes-up the input device in response to said wake-up signal from said detection circuit.

1 38. (New): The system of claim 1 wherein electric current consumption of
2 said optical mouse during said sleep state is about 5-8 microamps.